2023 Sustainability Report

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ARAPAHOE BASIN COLORADO





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ARAPAHOE BASIN ENVIRONMENTAL POLICY

As stewards of an exceptional mountain environment, Arapahoe Basin Ski Area is committed to providing quality outdoor recreation experiences. Our staff and guests realize that Arapahoe Basin is a priceless natural treasure. We strive to continually improve our environmental performance in order to provide enjoyment of Arapahoe Basin for future generations of snow and mountain enthusiasts.



Greetings, Snow Huggers!

Welcome back to another Arapahoe Basin sustainability report, covering the 2022-2023 season. Despite below average snowfall, skiing conditions were great all winter and visitation was up. With good snow and more visitors, CO2 emissions grew again after a four-year decline that reached its all-time low in 20-21. We shuttled guests in our parking lots again in 22-23, served up more burgers, fries and Bloodies, and held more engaging events. All these activities inevitably contributed to more resource use.

However, a busier season – as well as growing emissions – also revitalized many of the most impactful sustainability initiatives at the mountain. We were poised for another great year of progress towards Carbon Neutrality and our 2025 goals!

In 22/23 we launched a shuttle program getting employees to work in fewer personal vehicles and saving significant emissions. We focused on waste reduction, putting the to-go, single-use F&B items of COVID-19 further in the rearview. We achieved our highest diversion rate ever (excluding years involving a replaced-chairlift's scrap metal load, that is...), thanks to our dedicated waste-sorting cafeteria staff – and you, our guests. Thanks team!

In a summer without major construction, we revisited recent work sites to finish up restoration work and focused on our natural environment. The reveg efforts at Len Ex showed especially great results around The Wall and at Blueberry Hill around Tower 11. We also spent time at the Norway wetland, where secondary restoration built on last summer's outstanding work. Half-a-dozen grass and sedge species were thriving there and an explosion of monkey flower flourished in the wetter areas, flashing beautiful yellow flowers throughout August and September.

We also prioritized advocating for systemic change, authoring op-eds and appearing in far-reaching publications. We supported clean transportation rulemaking in Colorado and growing climate-action bipartisanship in Washington. We even earned another NSAA Golden Eagle Award – this year in a new category: Community & Partnerships – for our collaborative work with peers and leadership in our community.

Read on for more of how Arapahoe Basin addresses sustainability at the mountain as well as outside our boundary ropes. And join us, because we can all do simple things to walk lighter on the planet – even in our ski and snowboard boots!

Thank you from the A-Basin Sustainability Team,

Mike Nathan, Sustainability Manager Helena Robinowitz, Sustainability Coordinator Tony Cammarata, Director of Development & Planning Alan Henceroth, Chief Operating Officer





Power to Save the Powder

ROADMAP 2025: 7 SUSTAINABILITY GOALS IN 7 YEARS

During the summer of 2018 the A-Basin sustainability team, senior leadership, and The Brendle Group – a Coloradobased sustainability consulting firm - met to establish a new direction and focus for the ski area's sustainability and master development plans. What began with a survey that highlighted A-Basin employees' desire to grow the sustainability program, quickly grew into this new sustainability strategic plan. We established 7 sustainability goals to be achieved in 7 years, by 2025, culminating in becoming a completely carbon free ski area!

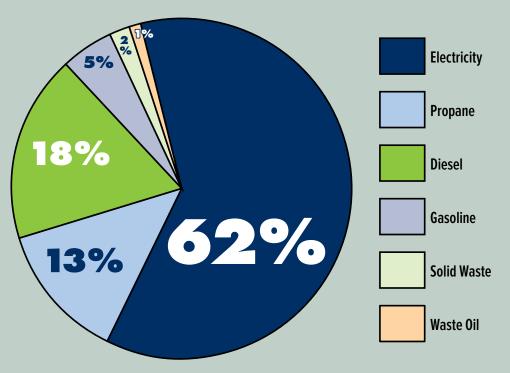
We are excited to continue this challenging endeavor and share our progress, but we will need your help. Visit our sustainability website arapahoebasin.com/sustainability, follow #sustainabilitysunday on our social media outlets, or better yet—find us at the ski area, to see how you can get involved and track our progress!



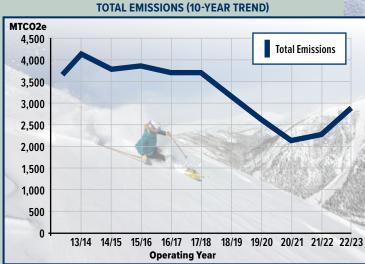
Carbon Neutral by 2025

Every ski area relies on a variety of resources to keep the lifts turning, snowcats grooming, and hot chocolate flowing. A-Basin continues to track resource use in order to see progress and discover inefficiencies.

CUMULATIVE CARBON EMISSIONS—GREENHOUSE GAS EMISSIONS BY SOURCE



A-Basin's 22/23 season was successful for a variety of reasons, including more skiers, quality snow, a new 6-pack Lenawee chair, and a more comprehensive employee shuttling program, among others. While these benefits improved the guest and employee experience, they contributed to our onsite carbon emissions. Area-wide fuel, electricity, and waste increased. More shuttling and snowcat grooming due to the long season increased fuel use, the upgraded Lenawee chair used more electricity, and more visitors led to greater landfill waste. Moving forward, next steps include achieving 100% Renewable Electricity, which will eliminate ~2/3 of our emissions. Electrifying our fuel-based fleet & building portfolios will help to help reduce the rest, even in years with plentiful snow and growing visitation.





22% 24% 6 / 2023 Sustainability Report

Roadmap 2025: 100% Renewable Electricity

Perhaps the most significant of our 7 Goals, achieving 100% Renewable Electricity will get us closer to Carbon Neutrality than any of our other goals or initiatives, as it will mitigate 62% of our carbon emissions. As such, renewable electricity has become a centerpiece in A-Basin's sustainability roadmap. With on-site solar arrays, utility and community-scale renewables projects, and an area-wide electrification plan, A-Basin's renewable energy portfolio will grow to be the industry standard.

23%

25%

Renewable Connect (solar)

On-Site

Generation

Grid: Solar

Grid: Wind

Grid: Other

Grid: Coal

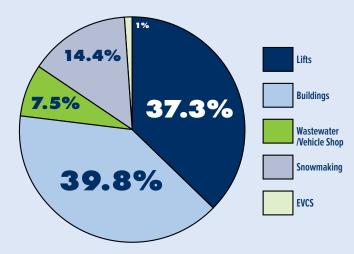
Grid: Natural Gas

Renewables

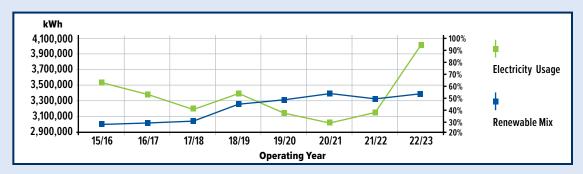
Electricity is used primarily to turn chairlifts, which run on fully electric motors 99% of the time, and to heat and power buildings. A significant amount of electricity also goes towards powering on-site water and wastewater treatment facilities, as well as our mostly airless (le: energy efficient) snowmaking system. By achieving 100% Renewable Electricity, all A-Basin lifts, buildings, and electricity-run systems would not emit any carbon, paving the way towards carbon neutrality.

In addition to consistently sourcing more and more of its electricity needs from renewables, A-Basin also continually works to reduce overall energy use through better behavior and more efficient equipment – detailed in our Energy Efficiency Policy.

22/23 ELECTRICITY SOURCING ELECTRICITY USE BY FUNCTION: PERCENTAGE



ELECTRICITY USE AND RENEWABLES



Roadmap 2025: 100% Renewable Electricity

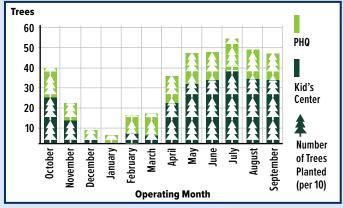
The 13.5 kW Kids' Center solar array, installed in 2015, provides about 20% of the building's electricity needs and compliments the sustainable-building measures in place in the Kids Center.

At 12,456', the 8.25 kW Snowplume solar array not only provides more than 90% of the building's needs, including the electricity usage at II Rifugio—our European-inspired mountaintop bistro—and ski patrol

headquarters, it is also the highest ski area-based renewable energy project anywhere in the world!

A-Basin also partnered with Xcel Energy to acquire 20% of its overall electricity needs from a utility-owned solar farm in Deer Path, CO—enough to power the entire snowmaking operation and a portion of chairlifts' electricity needs.

22/23 CO₂ EMISSIONS REDUCTION EQUIVALENT



TOTAL SOLAR PRODUCTION BY SEASON			
SEASON	KIDS CENTER	PHQ	TOTAL
15/16	15,175 kWh	0	15,175 kWh
16/17	12,309 kWh	0	12,309 kWh
17/18	10,510 kWh	10,504 kWh	21,014 kWh
18/19	12,505 kWh	11,061 kWh	23,566 kWh
19/20	15,131 kWh	12,637 kWh	27,768 kWh
20/21	14,888 kWh	8,774 kWh	23,662 kWh
21/22	15,256 kWh	5,976 kWh	21,232 kWh
22/23	13,488 kWh	8,360 kWh	21,848 kWh

Notes:

Planting one tree offsets the same amount of carbon emissions as generating 55.3 kilowatt-hours of electricity through renewable sources like solar

CUMULATIVE EMISSIONS REDUCTION (CO₂ lbs)





Roadmap 2025: 75% Landfill Diversion

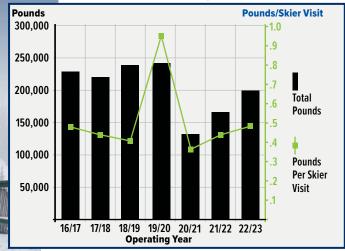
Solid waste—aka the trash we send to the landfill—only accounts for roughly 2-3% of our overall greenhouse gas emissions. However, waste reduction is an accessible way to get involved in sustainable action and a significant focus in our Summit County community.

Recycling and composting bins are provided wherever waste bins are encountered. We also run a comprehensive waste-sorting program where staff sort all guests' food and beverage waste to ensure that no unnecessary waste ends up in the landfill. Staff are encouraged and empowered to

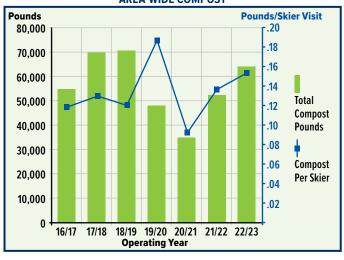
bring compost, recycling, and glass from home, as A-Basin provides free compost bins for all who don't have access to them at home. A-Basin also run "hard-to-recycle item," scrapmetal, soft plastics, and ski & snowboard recycling programs.

Lastly, reuse, reduce, and recycling practices, as well as comprehensive waste-guideline trainings, are integrated into all departments. Awesome examples include terrain park features (from old Norway lift towers), deceleration devices (from foam chair and tower padding), and summer trail features (repurposed mountain ops lumber).

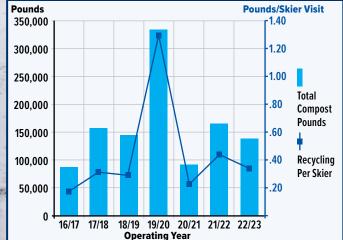
AREA-WIDE WASTE



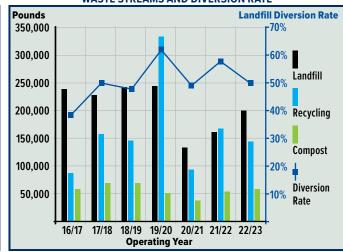
AREA-WIDE COMPOST



AREA-WIDE RECYCLING



WASTE STREAMS AND DIVERSION RATE



Roadmap 2025: Carpooling and Public Transportation

Arapahoe Basin strongly encourages guests and employees to ride the Summit Stage—Summit County's free bus system—or to carpool to the ski area. Lift ticket discounts and premium parking spaces are available to guests who do so. Employees are required to carpool or ride the bus to work on many Saturdays and Sundays.

In an effort to reduce A-Basin's fuel consumption and transportation-related emissions, a no-idling policy is in place at the ski area. Innovative grooming techniques and vehicle sign-outs and logs also help keep fuel-usage low.

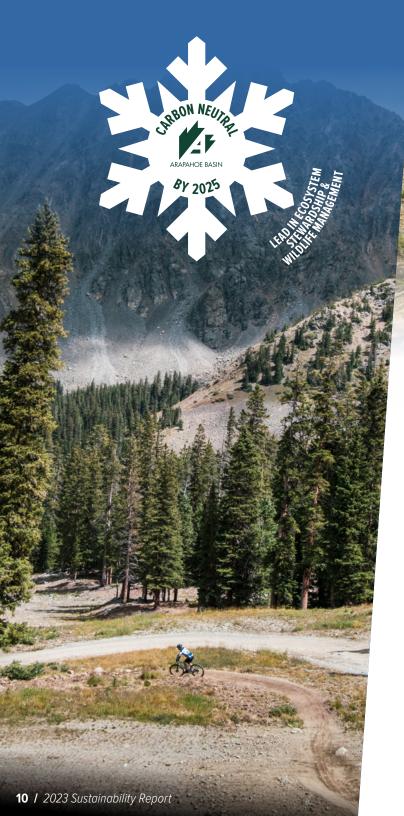
Starting in 2019, A-Basin also began partnering with the Colorado Carbon Fund to offset all of the ski area's fuel-related emissions. The CO Carbon Fund supports forestry, renewable energy, and farming projects here in Colorado that help reduce emissions at the source as well as sequester carbon already in the atmosphere. However, A-Basin is aware that more efficient employee carpool shuttling (in the forms of a daily employee shuttle and weekend employee shuttling) led to increased fuel usage, and therefore greater onsite carbon emissions. While A-Basin's reported fuel usage grew, efficient shuttling actually decreased overall fuel usage, as fewer employees drove their own vehicles to work. A-Basin also worked with the Summit Stage and Snowstang* to create more efficient bus routes for employees, guests, and the Summit and CO communities at large as well as providing direct incentives, including discounted lift tickets.





AREA-WIDE FUEL USE

Gallons
80,000
70,000
60,000
40,000
30,000
20,000
16/17 17/18 18/19 19/20 20/21 21/22 22/23
Operating Year





Ecosystem stewardship and secondary restoration have always been integrated into all practices at A-Basin. In the past, Golden Eagle Awards have been awarded by the NSAA to recognize the extra efforts put in place during the Montezuma Bowl, Beavers, and Steep Gullies expansions. To this day, whether the project is big or small, ecosystem protection is built into every operation in the ski area. This past season, building a new uphill bike trail, willow sprigging the Norway Wetland (& other wetland areas), revegetating the bottom of Lenawee, and hosting our first Montezuma Bowl Cleanup event, highlighted their commitment to maintaining their legendary high alpine environment.

While the Norway Wetland was officially completed in the summer of 2022, A-Basin saw room to improve the wetland's carbon sequestration capabilities. With the help of Peak Ecological, members from multiple departments came together to plant over 1,375 willow sprigs, re-seed, and weed the entire Norway Wetland site.

Willow sprigging entailed cutting leafless willow bush branches and planting them, as leafless sprigs put all of their energy into developing roots. This process allowed for wetland expansion through the usage of existing willows. According to Peak Ecological, their summer of 23 willow sprigging constituted a successful project, as over 70% of willows held. The Sustainability team also sprigged another wetland site (skier's right of Derchum's Gulch) to further maximize A-Basin's carbon sequestration capabilities.

Ecological restoration is also ingrained into all ski area practices. This past summer, trail crew worked on an uphill bike trail to the summit. They used recycled wood for bridges over designated wetland areas as to minimize ecosystem disturbance. A-Basin also completed renovations on Lenawee's bottom terminal, and topped it off with native seed mixes and Summit County compost, as to facilitate revegetation. Lastly, A-Basin brought the community together to clean up Montezuma Bowl. Guests, employees, and locals picked up over 480 lbs of trash. Employees also came together throughout the summer to pick up trash all over the mountain.

Roadmap 2025: No Net Increase in Water Use

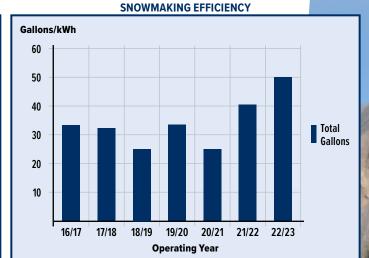
Arapahoe Basin is home to two on-site drinking water treatment facilities and one on-site waste-water treatment facility. Water is processed at BML and beneath the A-Frame for drinking, cooking, dish washers, toilets and hand wash sinks. While a necessity, much of the infrastructure behind these services was aging and inefficient, thus using much more than necessary. Through a number of recent upgrades, A-Basin is confident that consumptive water use will not only

stay flat despite continued increases in business volume and length of season, but will actually begin to noticeably decrease.

Highly efficient dishwashers in the kitchen, waterless urinals, and low-flow toilets and faucets are just a few of the water saving pieces of equipment being installed at the mountain as we speak.

CONSUMPTIVE WATER USE Gallons 1,500,000 1,000,000 500,000 -1,000,000 -1,500,000 16/17 17/18 18/19 19/20 20/21 21/22 22/23 Operating Year Note: Regative values are due to significant underground pipe infiltration during periods

of ground thaw and high runoff.



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PROJECTS AND ACHIEVEMENTS

ELECTRIC VEHICLE CHARGING STATION

In 2021, A-Basin installed 10 level II Chargepoint EV chargers thanks to funding from the Colorado Energy Office and Xcel Energy. The chargers sit at the front row of the Early Riser parking lot, providing EV drivers with the best parking and incentivizing sustainable driving. After roughly two years of operation, the chargers delivered roughly 62 megawatts of electricity, which offset about 1840 gallons of gasoline and accounted for a reduction of approximately 44 metric tons of carbon.

STEILHANG HUT (WATER & ENERGY EFFICIENT)

A-Basin's mid-mountain German-inspired hut, Steilhang, which opened in late 2021, was built to be an energy efficient and waterless building, which provides a plethora of environmental benefits. As a waterless building, no underground pipes and trenches needed to be built to transport water up the mountain, which also saves energy. Because the building's water (used for hand washing) is transported in individual tanks, employees practice extremely efficient water-usage behavior, as to minimize the need to head to BML to use water. Steilhang also has compost toilets, whose material are used for re-veg projects around the mountain.

Lastly, Steilhang uses solar tubes and large windows for light, which use the sun to light the building, minimizing the need for artificial lighting.

DEPARTMENT PLANS

A-Basin worked with every single department to create tailored sustainability plans. Each plan includes energy & water efficiency, waste reduction, responsible procurement, advocacy, transportation, and individual behavior action items. Each plan also encourages all employees to provide feedback, questions, and big ideas to further grow their engagement with the mountain's sustainability initiatives. Lastly, each plan and all sustainability policies are incorporated into trainings and orientations.

OTHER DEVELOPMENTS

- · Off-grid ski patrol and lift operator huts
- FreeAire refrigeration economizer
- · Waste-oil burning furnace
- Reusable and durable F&B items
- Ace's Wild Adventure kids learning zones

2023 GOLDEN EAGLE AWARD: COMMUNITY AND PARTNERSHIPS-FROM THE NSAA

A-Basin was awarded for its mentorship and engagement with ski industry peers, in their community and beyond. Arapahoe Basin remains a champion of collaborative climate work and is always willing to bring others along with them.

2022 NSAA GOLDEN EAGLE AWARD: CLIMATE CHANGE IMPACT AWARD-FROM THE NSAA

In 2022 A-Basin earned multiple Golden Eagle nominations for the ways in which they tackle environmental work. They promote climate action and advocacy at a resort level, and encourage their consumer base, community and political leaders to do the same. A-Basin's strategic sustainability plan culminates in the ski area becoming a 100% carbon neutral operation by 2025. Their new EV chargers, free for the first year and placed in some of the best parking, encourage guests to be more green themselves. Arapahoe Basin is directly contributing to the continued removal of barriers to EV adoption in mountain towns and being vocal about it. The organization has signed on to business letters and even written their own op-ed urging for climate action at state and federal levels.

2018 SKI MAGAZINE AND NSAA GOLDEN EAGLE AWARD— HERO OF SUSTAINABILITY— SHA MIKLAS

In May 2018, Arapahoe Basin Senior Manager of Guest Services & Sustainability Sha Miklas received recognition from NSAA and SKI Magazine as Hero of Sustainability for her efforts in creating and leading





Arapahoe Basin supports its environmental partners in a multitude of ways, including its Snow Huggers Club, the Employee Environmental Fund, and hosting the Save Our Snow Event, and Wild & Scenic Film Festival.

The Snow Huggers Club provides members with exclusive discounts at A-Basin while offsetting the quests' ski season travel emissions, and this year raised over \$6,000 for our partner, High Country Conservation Center. The program has generated nearly \$100,000 for HC3 since its beginning in 2009. The Employee Environmental Fund (with funds matched by A-Basin), has 119 members and this season raised over \$6.800 for our partner, the Eagle-Summit Wilderness Alliance.

The Save Our Snow Event is our yearly sustainability celebration focused on education, building collaboration, and having fun! The event focuses on a carpooling and public transportation 'Thank You!' for guests, and includes a base area party featuring a green village with our environmental partners, an on-snow gear demo, a prize drawing and silent auction, and live music. In addition to the funds raised throughout the day, A-Basin donates \$1 for each skier at the mountain that day to HC3.

We host the Wild & Scenic Film Festival every year in support of the Eagle-Summit Wilderness Alliance. Wild & Scenic is an environmentally-themed film fest to raise climate awareness and inspire activism. This year's festival was themed "Protecting Wilderness, Climate Action, and Honoring Indigenous People" and raised \$12,000 for ESWA's wilderness stewardship work in and around Summit County.





PARTNERS

HIGH COUNTRY CONSERVATION CENTER is a non-profit organization dedicated to promoting practical solutions for waste reduction and resource conservation in our mountain community. High Country Conservation Center works with residents, businesses and schools in areas including waste reduction, energy efficiency and clean energy and sustainable food production.

HIGHCOUNTRYCONSERVATION.ORG

NATIONAL FOREST FOUNDATION engages Americans in community-based and national programs that promote the health and public enjoyment of the 193-million-acre National Forest System and administers private gifts of funds and land for the benefit of the National Forests.

NATIONALFOREST.ORG

EAGLE SUMMIT WILDERNESS ALLIANCE was formed to raise cash and in-kind donations to help the Dillon Ranger District of the White River National Forest maintain the Summit County portions of the Eagles Nest, Ptarmigan Peak and Holy Cross Wilderness areas.

EAGLESUMMITWILDERNESS.ORG

THE SUMMIT STAGE is Summit County's free county-wide bus system that provides access to Arapahoe Basin from November through May. Guests who take the Summit Stage get dropped off right at the ski area and can receive lift ticket discounts for taking public transportation.

SUMMITSTAGE.COM

COLORADO OPEN LANDS is dedicated to preserving the unique open spaces of the Central Rockies, through land stewardship, public education and landowner consultation, to ensure and enhance the rural mountain character of our communities.

COLORADOOPENLANDS.ORG

FRIENDS OF THE DILLON RANGER DISTRICT (FDRD):

FDRD is a non-profit that preserves forest land, both in the White River District and nationally, through education outreach, volunteer initiatives, and community-building projects.

FDRD.ORG

ADVOCACY

"Walking-the-walk" and embodying the values we espouse has always been the basis of our sustainability program. Doing all of the emissions-saving actions here at the ski area has been a great way for us to highlight what is possible when it comes to greening your ski area operations, but we would be irresponsibly naïve to think that addressing impacts from our operations alone is enough. Working to expand climate resiliency, justice, and sustainable action beyond our ski area boundary through advocacy is the most important piece of our program. We spent the year authoring op-eds in newspapers, writing letters and testimonials supporting specific climate policy, and even represented the ski industry and our way of life in-person in Washington DC. A few highlights from the 22-23 season included:

- COO, Alan Henceroth participated in the NSAA's Skiing on The Hill DC Mission in September. He, along with athletes and other ski industry leaders engaged in meetings with elected officials discussing current legislation and key topics to the ski industry including labor and work visas, housing, public lands management and of course climate change. A few key policy pieces Al and our colleagues supported in DC were the BIG WIRES and PROVE It Acts, calling for creating better-integrated grids (to support the explosion of renewables coming online) and reliable, transparent emissions reporting laws respectively.
- In May, with our friends at Snowbird, we co-authored an op-ed in the Salt Lake City Tribune in appreciation of the work of Utah Congressman John Curtis, who is the chair of the Conservative Climate Caucus (and the Congressional Ski Caucus) and his Republican colleagues. His leadership acknowledging the human-driven causes of climate change and work to drive bipartisan-led innovation in the transportation and energy sectors is a great example of how to work for the systemic changes our society and climate needs despite the polarizing divide that defines our political landscape.
- In September, another wide-reaching op-ed hit the presses in the Denver Post.
 This time co-authored with Aspen Ski Co., our letter pleaded with state lawmakers to consider the most aggressive guidelines in their Advanced Clean Cars rulemaking pledging accelerated EV adoption and infrastructure development in our state.
 The rulemaking was a success, and our joint message with Aspen was crucial in representing the needs of remote and unique fleets like ours that will depend on reliable and innovative EV options to reach our goals and ensure more of the snowy winters we depend on.





COLLABORATION

A-Basin didn't achieve this alone. As a founding member of the National Ski Area Association (NSAA), A-Basin participates in the Climate Challenge every year, which both holds resorts accountable for their climate impact and for committing to a sustainable project, and creates a network for ski areas to share best practices. Also through the NSAA, A-Basin and other resorts came together to advocate for various national environmental bills in DC. A-Basin was rewarded for their collaboration efforts with an NSAA Golden Eagle Award in Community and Partnerships.

Outside of the NSAA, this past year, A-Basin worked with various resorts at the Copper Mountain Sustainability Summit to share sustainability ideas and progress, including wetland restoration, revegetation, and seed collecting methodologies. Besides educating other resorts, A-Basin also committed to educating guests through their Ski With a Ranger Program. The Program, through the FDRD, connected guests (for free) to educated forest rangers and volunteers to provide them a sustainability & ecology-related tour of the mountain on skis or snowboards.









(WE ALL HAVE THE) POWER TO SAVE THE POWDER



ACTION ITEMS FOR YOUR A-BASIN VISIT

- Join the Snowhuggers Club
- Utilize sustainable transportation carpool, ride the bus, consider an EV
- Bring your own water bottle
- Keep A-Basin beautiful Leave No Trace
- Follow waste guidelines and signage use indoor tray racks and let us sort your waste
- Connect with our Sustainability Team, email sustainability@a-basin.net
- Follow along check out our
 Sustainability Sunday video series online

ACTION ITEMS AT HOME

- Connect with local environmental groups
- Understand your own waste sorting guidelines
- Learn about environmental policy nationally and in your community VOTE!
- VOTE and learn about environmental policy at the local, state, and national levels
- Purchase with purpose consider social and environmental responsibility
- Find your lever protect the environment in a way that's meaningful AND ENJOYABLE for you



ARAPAHOE BASIN COLORADO

SUSTAINABILITY EMAIL sustainability@a-basin.net



MIKE NATHAN **Sustainability Manager.**

Mike has worked at A-Basin since 2010, starting in lift operations and working in many roles over the years. As Sustainability Manager, he has helped oversee water-saving building retrofits, energy-efficient lighting and heating systems, comprehensive waste reduction and transportation programs, onsite solar installations, wetland and ecosystem restoration projects, sustainability-themed events, company-wide environmental policies, and collaborations with a variety of partners. Before finding A-Basin, Mike obtained a Bachelor of Science degree in Environmental Studies from the University of Vermont. He is also a founding member of A-Basin's DEI committee and is currently the Board Chair for High Country Conservation Center.



HELENA ROBINOWITZ

Sustainability Coordinator.

Helena helps to manage sustainability projects, policies, and initiatives. Her time is spent restoring wetlands, being a waste-guideline expert, and acting as a sustainability liaison between all departments and employees, among other things. Before her role in Sustainability, she also worked in lift ops for a year, after spending a year traveling and working on vegetable farms in Washington State and the Italian Alps. She joins A-Basin with a degree in Economics and minor in Italian Studies from Pomona College.

ARAPAHOE BASIN

BY 2025